

PAINTED ROCKS DAM

Fact Sheet

PROJECT DESCRIPTION

- Located on the West Fork of the Bitterroot River, 30 miles southwest of Darby in Ravalli Co.
- Owned by DNRC, managed and operated by SWPB
- Project consists of:
 - 143 feet-high, 800 foot-long rolled earthfill dam with impervious center.
 - Reinforced concrete chute spillway.
 - Circular 10-foot diameter concrete lined rock outlet tunnel.
 - 10-foot diameter, horseshoe shaped reinforced concrete tunnel, with two 5 foot by 8 foot gates (one operating and one emergency), located at the bottom of a vertical wet tower.
- Constructed in 1939
- Storage at full pool is 32,362 acre-feet, covering 655 surface acres.
- DFWP purchases 15,000 acre-feet of water for downstream fisheries
- Painted Rocks Water Users Association has 41 contracts for 10,000 acre-feet of water
- Montana Fish, Wildlife and Parks pays half of the operating and maintenance costs, with the water users paying the remaining half.

PROJECT DEFICIENCIES

- The spillway stilling basin floor is severely cracked.
- The spillway chute concrete is deteriorated and needs repairs or replacement.
- The spillway configuration has undesirable flow characteristics that reduce its safe capacity.

PROPOSED ACTIONS TO ADDRESS DEFICIENCIES

Repairs and maintenance are on-going and have included the following:

- The operating gate was removed, repaired and reinstalled during the summer of 2008. Cost of the repair was \$53,738, paid for by the water users.
- A feasibility study that assessed the condition of the spillway and gate repairs was conducted was completed in 2007. Cost: \$130,874, paid by the DNRC.
- The emergency gate roller chain was replaced in 2006 at a cost of \$50,377. The water users paid the majority of the cost.
- The gate hoist mechanism was rehabilitated in 2005. The \$23161 cost was paid for entirely by the water users.
- A new log boom and security fence were installed in 2004. The water users paid for the log boom and the DNRC for the fence. Costs: Log Boom – \$20,453; Fence - \$4,916
- Future conduit and gate work may cost up to \$14 million.
- A spillway rehabilitation study is on-going. Cost of the spillway rehabilitation could exceed \$20 million.

